



U.S. Demil, LLC

Best Technology Available in the WORLD
Patented “Decineration™” Thermal Process



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Advantages

Concern

Safety



No Burning



No Residuals



No Byproducts



No Added Chemicals



No Transportation



Decineration™

Contained processing

Non-incinerative – no flame

No process residuals

No byproducts

No added chemicals

Can be placed onsite



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Decineration Technology

Decineration™ is a paradigm changing, cost effective, single step, closed loop munitions demilitarization processing technology. As the World's best, it provides economic, operational and regulatory advantages

- Can be permitted following US EPA Regulations
- Meets the requirements of US EPA, NEW MACT standards unlike APE1236 Rotary Kiln Incinerator derived systems
- Decineration™ is a non-incinerative, thermal process determined by the US EPA Headquarters Solid Waste Division to be a “recycling, disassembly, reclamation, or other materials recovery process” and not hazardous waste treatment in the context of the Military Munitions Rule.
- Complex, long chain, solid energetics (nitrocellulose, nitramines and nitrate esters) are decomposed into short chain, light hydrocarbon gases by fracturing the carbon-carbon, carbon-nitrogen, nitrogen-oxygen and nitrogen-nitrogen bonds.
- The process occurs at ambient pressure and moderate temperature of approximately 400° - 900° F in an externally heated rotary tube without contact between heating source and munitions components

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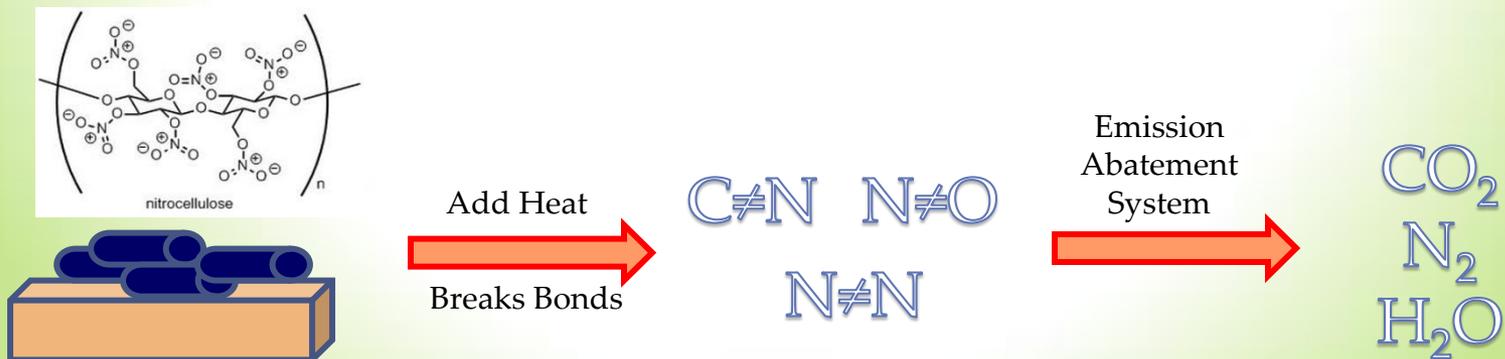
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Science of Decineration Technology

The science behind the USD Decineration™ technology has been proven and accepted for decades in both the petroleum industry and in the R&D community. In the petroleum industry, it is the basis for "cracking" long chain hydrocarbons into lighter distillates.

The application of the science to the carbon-carbon (C-C) bond of hydrocarbons is a mature industrial technology.

The industrial embodiment of the Decineration™ process is the use of an externally heated, rotating horizontal tube which essentially duplicates the laboratory model known as "a horizontal flat plate in atmosphere". When the energetic is applied to the surface of the hot plate, it begins to decompose via the breaking of various molecular bonds.



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